

Mike DeWine, Governor Randy Gardner, Chancellor

# Memorandum

To: Provost and Chief Academic Officers

From: Paula Compton, Associate Vice Chancellor, Articulation and Transfer

Date: January 6, 2021

Subject: Endorsement Survey for Proposed Changes to Engineering and

Engineering Technology that will Impact Career Technical Assurance Guide (CTAG), Ohio Guaranteed Transfer Pathways (OGTP), and Transfer

**Assurance Guide (TAG)** 

Due to the increasing interconnectedness of transfer initiatives, in particular that of Transfer Assurance Guides (TAGs) and the Ohio Guaranteed Transfer Pathways (OGTPs), this endorsement survey is asking you to look holistically at a proposal to update the Engineering TAG and to review the proposed Engineering OGTPs utilizing the updated TAG and an additional proposal of utilizing select Engineering Technology TAG courses.

### Part I Background:

In early 2020 the Ohio Articulation and Transfer Network (OATN) held a discussion with the Engineering and Engineering Technology Transfer Assurance Guide (TAG) panel leads to determine if revisions were needed to the Engineering and Engineering Technology TAGs. Following this discussion, a research survey was distributed statewide to gain further knowledge surrounding the exploration of possible TAG revisions and to better understand transferability between Engineering Science and Engineering Technology programs.

Succeeding survey conclusion, statewide research was compiled, analyzed, and discussed with the Engineering Science TAG panel members, as well Engineering Technology panel leads and OATN staff working within Career Technical Assurance Guides (CTAGs), Ohio Guaranteed Transfer Pathways (OGTPs), and TAGs. This initial TAG panel leads and members meeting lead to a recommendation to convene the OGTP Engineering and Engineering Technology faculty panels to review research findings and TAG panel next step recommendations. The OGTP Engineering and Engineering Technology faculty panels supported the proposed TAG changes.

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Following discussions, proposed statewide recommendations include:

- A review of Introduction to Engineering (OES001) TAG approved courses across four-year institutions indicates differing objectives for this course, as well as differing semester credit hours from the current 1 credit hour structure. Removal of Introduction to Engineering (OES001) from the Engineering TAG is proposed.
- 2. A review of Engineering Statistics (OES004) courses across the state indicate that this course is generally 3 semester credit hours. The second proposed recommendation is to increase the current 2 semester credit hours to 3 semester credit hours. Existing 2 semester credit hour approved courses will be allowed to remain within the TAG; however, new OES004 submissions will require 3 semester credit hours within this proposal.
- 3. The third proposal is to change the way in which the Engineering TAGs have been grouped. The current TAG includes Aerospace, Agriculture, Civil, and Mechanical Engineering. The panel proposes separating these into the following groupings in order to better serve students since the program requirements vary across these programs: Aerospace, Agricultural, and Mechanical Engineering and Civil Engineering.
- 4. Allow the limited usage of select Engineering Technology (OET) TAG courses as part of the OGTPs for in order to better support transfer (details included in part II).

### Part II Background:

In June 2015, Section 3333.16(C) of the Ohio Revised Code was signed into law. This law requires the Chancellor of the Ohio Department of Higher Education to develop a process, by December 1, 2018, to establish statewide guaranteed transfer pathways from two-year to four-year degree programs in an equivalent field. In order to meet this charge, the Ohio Department of Higher Education has begun to convene faculty panels with representatives from Ohio's two- and four-year public institutions of higher education.

The Ohio Guaranteed Transfer Pathways (OGTP) Engineering faculty panel began its work in Fall 2017. The statewide panel is led by Scott Molitor, The University of Toledo; Deb McAvoy, Ohio University; D. Blake Stringer, Kent State University; and Paul Svatik, Owens Community College. The faculty panel, which was comprised of representatives of Ohio's public institutions of higher education, met in person as well as virtually through email to discuss, refine, and draft its proposals for the statewide pathways. Panel members were also tasked with facilitating discussion about the proposed pathway on their own

campuses. The panel has finalized its proposal for statewide pathways for the transfer of Associate of Science degrees into bachelor's degrees in the following areas: 1. Aerospace, Agricultural, or Mechanical Engineering, 2. Computer or Electrical Engineering, and 3. Civil Engineering

In order to facilitate Ohio Guaranteed Transfer Pathways transfer, which is focused on helping students complete an associate degree and transfer to complete their bachelor's degree, the Engineering TAG panel has proposed incorporating select Engineering Technology TAG courses into the Engineering Science OGTPs. These courses were identified as areas within Engineering that do not require calculus as a prerequisite. Proposed inclusions are as follows:

- a. Inclusion of the Electrical Engineering Technology- Digital Logic (OET002) TAG within the Computer and Electrical Engineering OGTP.
- b. Inclusion of the Mechanical/Manufacturing Engineering Technology- Manufacturing Processes (OET010) TAG within the Aerospace and Mechanical Engineering OGTP.
- Inclusion of the Mechanical/Manufacturing Engineering Technology- Computer Aided Drafting/Design (CAD) (OET012) TAG within the Aerospace and Mechanical Engineering OGTP.
- d. Inclusion of the Mechanical/Manufacturing Engineering Technology- Engineering Materials (OET013) TAG within the Aerospace and Mechanical Engineering OGTP
- e. Inclusion of the Civil/Construction Engineering Technology- Surveying (OET015) TAG within the Civil Engineering OGTP.
- f. Inclusion of the Electrical Engineering Technology- Programmable Logic Controllers (OET022) TAG within the Computer and Electrical Engineering OGTP.

Proposed inclusion of the OET courses in these Engineering Science OGTPs would NOT require four-year Engineering programs to submit their courses for OET TAG approval. For example, a four-year Mechanical Engineering program would not need to submit its manufacturing processes course for OET 010 approval. In many cases, universities have both Engineering and Engineering Technology programs, and would already have Engineering Technology courses approved as OET TAG courses.

## What we need from you:

Please arrange to have the appropriate faculty at your institution complete these surveys as soon as possible but no later than **Friday**, **February 5**, **2021**. We are collecting only one representative response per institution per survey. However, the OGTP endorsement survey will need to be completed multiple times in order to provide a response for each of the three pathway areas if all are offered at an institution.

The online surveys are available through the following links:

- Part One (1)- Engineering TAG Endorsement: https://www.surveymonkey.com/r/PH39SSY
- Part Two (2)- Engineering OGTP Endorsement:
   <a href="https://www.surveymonkey.com/r/JFHM8DM">https://www.surveymonkey.com/r/JFHM8DM</a>

**Important Note:** You must complete the survey via the links provided above. The attached PDF files are for reference only. Do not use the PDF version to respond to the survey.

To better assist with survey completion and answer any questions, we will hold a Q&A session on <u>January 29, 2021 from 12:00 PM-1:00 PM</u>. Should you be interested in participating please join the session <u>here</u>.

Thank you in advance for your assistance. If you have any questions, contact Candice Grant, Senior Director for Ohio Guaranteed Transfer Pathways, at 614-466-4186 or <a href="mailto:cgrant@highered.ohio.gov">cgrant@highered.ohio.gov</a> or Jessi Spencer, Director for Policy, Budget, and Constituent Relations, at 614-728-4706 or <a href="mailto:jspencer@highered.ohio.gov">jspencer@highered.ohio.gov</a>.

### Attachments:

TAG Engineering Endorsement Survey (PDF)
Statewide\_Engineering\_Civil\_OGTP
Statewide\_Engineering\_Computer\_Electrical\_OGTP
Statewide\_Engineering\_Aero\_Ag\_Mech\_OGTP
OGTP Engineering Endorsement Survey (PDF)